(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 6 February 2003 (06.02.2003)

PCT

(10) International Publication Number WO 03/010406 A2

(51) International Patent Classification?:

E06B

(21) International Application Number:

PCT/US02/23360

(22) International Filing Date:

23 July 2002 (23.07.2002)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/307,349

23 July 2001 (23.07.2001) US

(71) Applicant (for all designated States except US): GEPFREY INDUSTRIES, INC. [US/US]; 429 Cushing Avenue, Dayton, OH 45429-2609 (US).

(72) Inventors; and

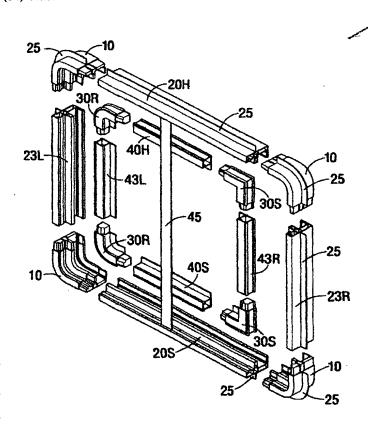
(75) Inventors/Applicants (for US only): GEPFREY, Dale, A. [US/US]; 2347 North First Street, Upland, CA 91784 (US).

GEPFREY, Gary, L. [US/US]; 429 Cushing Avenuc, Dayton, OH 45429 (US).

- (74) Agent: NAUMAN, Joseph, G.; 696 Renolda Woods Court, Dayton, OH 45429-3415 (US).
- (81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: WATER-TIGHT WINDOWS WITH PREFORMED CORNERS



(57) Abstract: A window construction applies to vertically or horizontally hung windows including horizontally sliding windows, to conventional double-hung windows wherein one or both sashes are movable, and to odd-shaped windows (hexagons, octagons, or the like). The outer window framework comprises lineal sections providing a header, a sill, and a pair of jambs, joined by formed corner sections of complementary cross-sectional configuration to achieve water-tight corner joints and a water-tight window. The outer framework incorporates flanges for mounting the complete window in a window aperture of a building or vehicle, and channels for receiving an inner framework of sashes and/or vents, and providing a peripheral seal for the same. The internal sashes may be single or multiple frames holding glass or comparable transparent or translucent panes. Sash frameworks likewise include a header, a sill, side posts (jambs), and (as needed) a peripheral or partial edge seal, which in use of sliding panes may require moving seal parts. The header, sill and jambs of both the outer window frame and internal sash sections are preferably lineal extrusions having cross-sectional configurations that are compatible with the profiles of preformed corner pieces. Preferred corner joints include a molded body with integral protruding splines that press fit into the ends of the lineal extrusion pieces with adjoining joint sealant to form a water-tight, rigid joint with a smooth exterior.

WO 03/010406 A2

Published:

 without international search report and to be republished upon receipt of that report For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.